

Amendment to the Claims

1. - 13. (Cancel)
14. (previously presented) A transgenic plant expressing a temporin cationic peptide.
15. (previously presented) A transgenic plant comprising a recombinant nucleic acid molecule, wherein the nucleic acid molecule encodes a temporin peptide.
16. (previously presented) The transgenic plant of claim 15, wherein the nucleic acid molecule comprises SEQ ID NO: 15.
17. (previously presented) The transgenic plant of claim 15, wherein the temporin peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOS: 17-26.
18. (previously presented) The transgenic plant of claim 17, wherein the temporin peptide further comprises an N terminal peptide extension of between 2 and 25 amino acids in length.
19. (previously presented) The transgenic plant of claim 18, wherein the N-terminal peptide extension is AMWK (SEQ ID NO: 39), ASRH (SEQ ID NO: 40), or ALWK (SEQ ID NO: 41).
20. (previously presented) A transgenic plant comprising a recombinant nucleic acid molecule, wherein the nucleic acid molecule encodes a fusion peptide having a formula P-T, wherein T is a temporin peptide and P is an anionic pro-region peptide.
21. (previously presented) A transgenic plant comprising a recombinant nucleic acid molecule, wherein the nucleic acid molecule encodes a fusion peptide having a formula P-S-T, wherein T is a temporin peptide, P is an anionic pro-region peptide and S is a spacer peptide.

22. (previously presented) A transgenic plant comprising a nucleic acid molecule encoding a peptide comprising an amino acid sequence selected from the group consisting of:

- (a) SEQ IDs: 17-26 and fragments thereof;
- (b) amino acid sequences that differ from an amino acid sequence specified in (a) by one or more conservative amino acid substitutions; and
- (c) amino acid sequences that share at least 90% sequence identity with an amino acid sequence specified in (a),

wherein the peptide has temporin biological activity.

23. (previously presented) The transgenic plant of claim 22, wherein the peptide further comprises an anionic pro-region peptide operably linked to the N-terminus of the peptide.

24. (previously presented) A transgenic plant comprising a recombinant nucleic acid molecule encoding a peptide comprising SEQ ID NO: 34.

25. (currently amended) The transgenic plant of claim 22, wherein the amino acid sequence shares at least 95% sequence identity to any of SEQ ID NOS: 17-26.

26. (previously presented) The transgenic plant of claim 18, wherein the recombinant nucleic acid molecule comprises SEQ ID NO: 33.

27. (previously presented) The transgenic plant of claim 21, wherein the temporin peptide comprises SEQ ID NO: 18.

28. (previously presented) The transgenic plant of claim 18, wherein the N terminal peptide extension comprises MAMWK (amino acids 1-5 of SEQ ID NO: 28) or MASRH (amino acids 1-5 of SEQ ID NO: 33).

29. (new) The transgenic plant of claim 17, wherein the peptide comprises the amino acid sequence shown in SEQ ID NO: 17.

30. (new) The transgenic plant of claim 17, wherein the peptide comprises the amino acid sequence shown in SEQ ID NO: 18.

31. (new) The transgenic plant of claim 17, wherein the peptide comprises the amino acid sequence shown in SEQ ID NO: 19.

32. (new) The transgenic plant of claim 17, wherein the peptide comprises the amino acid sequence shown in SEQ ID NO: 20.

33. (new) The transgenic plant of claim 17, wherein the peptide comprises the amino acid sequence shown in SEQ ID NO: 21.

34. (new) The transgenic plant of claim 17, wherein the peptide comprises the amino acid sequence shown in SEQ ID NO: 22.

35. (new) The transgenic plant of claim 17, wherein the peptide comprises the amino acid sequence shown in SEQ ID NO: 23.

36. (new) The transgenic plant of claim 17, wherein the peptide comprises the amino acid sequence shown in SEQ ID NO: 24.

37. (new) The transgenic plant of claim 17, wherein the peptide comprises the amino acid sequence shown in SEQ ID NO: 25.

38. (new) The transgenic plant of claim 17, wherein the peptide comprises the amino acid sequence shown in SEQ ID NO: 26.

39. (new) The transgenic plant of claim 17, wherein the amino acid sequence comprises SEQ ID NO: 17, 18, 19, 20, 21, 22, 23, 24, 25, or 26 with one conservative amino acid substitution.

40. (new) The transgenic plant of claim 23, wherein the anionic pro-region peptide comprises SEQ ID NO: 16.

41. (new) The transgenic plant of claim 21, wherein the spacer peptide comprises between 2 and 25 amino acids.

42. (new) The transgenic plant of claim 21, wherein the spacer peptide comprises SEQ ID NO: 41.

43. (new) The transgenic plant of claim 20, wherein the temporin peptide comprises SEQ ID NO: 17, 18, 19, 20, 21, 22, 23, 24, 25, or 26.

44. (new) The transgenic plant of claim 21, wherein the temporin peptide comprises SEQ ID NO: 17, 18, 19, 20, 21, 22, 23, 24, 25, or 26.

45. (new) The transgenic plant of claim 15, wherein the plant is a tobacco plant or a potato plant.

46. (new) The transgenic plant of claim 15, wherein the plant is resistant to bacteria or fungi.

47. (new) The transgenic plant of claim 45, wherein the bacteria is *E. carotovora* or *E. coli*.

48. (new) The transgenic plant of claim 45, wherein the fungi is a *Fusarium sp.* or a *Phytophthora sp.*.